



6655 - CAL-NIS-304: NIRISS Stability Monitoring

Cycle: 3, Proposal Category: CAL/NIRISS

INVESTIGATORS

<i>Name</i>	<i>Institution</i>
Dr. Kevin Volk (PI) (CSA Member)	Space Telescope Science Institute - CSA - JWST
Dr. Andre Martel (CoI)	Space Telescope Science Institute
Dr. Paul Goudfrooij (CoI)	Space Telescope Science Institute

OBSERVATIONS

<i>Folder</i>	<i>Observation</i>	<i>Label</i>	<i>Observing Template</i>	<i>Science Target</i>
Observation Folder				
	1		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	2		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	3		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	4		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	5		NIRISS External Calibration	(1) ASTROMETRIC-FIELD
	6		NIRISS External Calibration	(1) ASTROMETRIC-FIELD

ABSTRACT

We request bi-monthly observations of the LMC astrometric field for monitoring of the NIRISS photometric stability and as a quick check on the astrometric stability of the instrument. This is a continuation of cycle 1 calibration program 1515 and cycle 2 program 4475.

This calibration program may change in response to system developments and the final Cycle 3 science program.

OBSERVING DESCRIPTION

We will observe the same position near the south ecliptic pole at one month intervals to assess the stability of the NIRISS detector over time. Inter-comparison of the stellar brightness values over time should show any long term changes in the NIRISS detector response or the overall system response. While some of the stars in the field will be variable, we will be able to eliminate these stars and make measurements on other stars within the field of view.

The target for this observation is the LMC astrometric field. This is a continuation of program 1515 in cycle 1 calibration and program 4475 in cycle 2.

TIMING CONSTRAINTS

We request observations at approximately 2 month intervals for the program. Each observation is given a 3 week window, and there are 5-week gaps between observations. This will prevent observations from being scheduled too close together in time. If for some reason an observation is not scheduled in the original time window there should be plenty of options for rescheduling the observations without coming too close to the other observations.

The windows assume a start of cycle 3 on 1 July 2024, but can be shifted as needed.

Proposal 6655 - Targets - CAL-NIS-304: NIRISS Stability Monitoring

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Miscellaneous
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000		
<i>Comments:</i> Category=Calibration Description=[Astrometric] Extended=NO					

Proposal 6655 - Observation 1 - CAL-NIS-304: NIRISS Stability Monitoring

Thu May 02 18:00:50 GMT 2024

Observation	Proposal 6655, Observation 1 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 1:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous				
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
Comments: Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#	Target										
	1	NONE										
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers		Subpixel Positions		Pattern Size				
	1	IMAGING	4									
Spectral Elements	#	Subarray	Aperture	Filter Wheel	Pupil Wheel	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	FULL	DEFAULT APERTURE	CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 6655 - Observation 1 - CAL-NIS-304: NIRISS Stability Monitoring

Special Requirements

Between Dates 01-JUL-2024 and 31-JUL-2024

Proposal 6655 - Observation 2 - CAL-NIS-304: NIRISS Stability Monitoring

Thu May 02 18:00:50 GMT 2024

Observation	Proposal 6655, Observation 2 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 2:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
<i>Comments:</i> Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#	Target										
	1	NONE										
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers		Subpixel Positions		Pattern Size				
	1	IMAGING	4									
Spectral Elements	#	Subarray	Aperture	Filter Wheel	Pupil Wheel	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	FULL	DEFAULT APERTURE	CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 6655 - Observation 2 - CAL-NIS-304: NIRISS Stability Monitoring

Special Requirements

Between Dates 01-SEP-2024 and 30-SEP-2024

Proposal 6655 - Observation 3 - CAL-NIS-304: NIRISS Stability Monitoring

Thu May 02 18:00:50 GMT 2024

Observation	<p>Proposal 6655, Observation 3</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRISS External Calibration</p>											
Diagnostics	(Visit 3:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous				
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
	<p><i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Astrometric]</i> <i>Extended=NO</i></p>											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers		Subpixel Positions		Pattern Size				
	1	IMAGING	4									
Spectral Elements	#	Subarray	Aperture	Filter Wheel	Pupil Wheel	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	FULL	DEFAULT APERTURE	CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 6655 - Observation 3 - CAL-NIS-304: NIRISS Stability Monitoring

Special Requirements

Between Dates 01-NOV-2024 and 30-NOV-2024

Proposal 6655 - Observation 4 - CAL-NIS-304: NIRISS Stability Monitoring

Thu May 02 18:00:50 GMT 2024

Observation	Proposal 6655, Observation 4 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 4:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
Comments: Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#	Target										
	1	NONE										
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers	Subpixel Positions	Pattern Size						
	1	IMAGING	4									
Spectral Elements	#	Subarray	Aperture	Filter Wheel	Pupil Wheel	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	FULL	DEFAULT APERTURE	CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 6655 - Observation 4 - CAL-NIS-304: NIRISS Stability Monitoring

Special Requirements

Between Dates 01-JAN-2025 and 31-JAN-2025

Proposal 6655 - Observation 5 - CAL-NIS-304: NIRISS Stability Monitoring

Thu May 02 18:00:50 GMT 2024

Observation	Proposal 6655, Observation 5 Diagnostic Status: Warning Observing Template: NIRISS External Calibration											
	(Visit 5:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections			Miscellaneous			
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
<i>Comments:</i> Category=Calibration Description=[Astrometric] Extended=NO												
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers	Primary Dithers	Subpixel Positions	Pattern Size						
	1	IMAGING	4									
Spectral Elements	#	Subarray	Aperture	Filter Wheel	Pupil Wheel	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	FULL	DEFAULT APERTURE	CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 6655 - Observation 5 - CAL-NIS-304: NIRISS Stability Monitoring

Special Requirements

Between Dates 01-MAR-2025 and 31-MAR-2025

Proposal 6655 - Observation 6 - CAL-NIS-304: NIRISS Stability Monitoring

Thu May 02 18:00:50 GMT 2024

Observation	<p>Proposal 6655, Observation 6</p> <p>Diagnostic Status: Warning</p> <p>Observing Template: NIRISS External Calibration</p>											
Diagnostics	(Visit 6:1) Warning (Form): Overheads are provisional until the Visit Planner has been run.											
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections			Miscellaneous				
	(1)	ASTROMETRIC-FIELD	RA: 05 21 56.5000 (80.4854167d) Dec: -69 29 54.10 (-69.49836d) Equinox: J2000									
	<p><i>Comments:</i> <i>Category=Calibration</i> <i>Description=[Astrometric]</i> <i>Extended=NO</i></p>											
Acquisition	#										Target	
	1										NONE	
Template	Pointing Type											
	PRIME											
Dithers	#	Pattern Type	Image Dithers		Primary Dithers		Subpixel Positions		Pattern Size			
	1	IMAGING	4									
Spectral Elements	#	Subarray	Aperture	Filter Wheel	Pupil Wheel	Readout Pattern	Groups/Int	Integrations/Exp	Total Dithers	Total Integrations	Total Exposure Time	ETC Wkbk.Calc ID
	1	FULL	DEFAULT APERTURE	CLEAR	F200W	NISRAPID	12	1	4	4	558.312	

Proposal 6655 - Observation 6 - CAL-NIS-304: NIRISS Stability Monitoring

Special Requirements

Between Dates 01-MAY-2025 and 31-MAY-2025